

REMARKS

In the Office Action, claim 13 was rejected under 35 USC §102(b) as being clearly anticipated by Buttgereit. Claims 9, 13 and 25 were rejected under 35 USC §102(b) as being anticipated by Kemper. Claim 16 was rejected under 35 USC §103(a) as being unpatentable over Buttgereit in view of Eich. Claim 16 was rejected under 35 USC §103(a) as being unpatentable over Eich in view of Buttgereit. Claims 13 and 25 were rejected under 35 USC §103(a) as being unpatentable over Wood in view of Mey and Von Kreisler. Claim 13 was rejected under 35 USC §103(a) as being unpatentable over Buttgereit in view of Mey or Wood. Claims 24 and 25 were rejected under 35 USC §103(a) as being unpatentable over Buttgereit and either May or Wood and further in view of Eich.

In response to the election of species requirement, applicant elects the species of Figure 5a with claims 13, 16, 24, 25, 26, 28, 29 being readable thereon.

Claim 13 has been amended to include the requirement (in relation to the step member) of "a free end at a distal end thereof, and an upwardly facing support surface for a user to stand on, between said free end and said flange portion". In addition "an upwardly oriented hook" has been amended to read "a hook extending out from the flange, in alignment with said step member, then up,".

Claims 26 to 29 have been added which are essentially the step member of claims 13, 9, 24 and 25, respectively, in combination with a utility pole.

The Examiner indicates "with respect to Buttgereit, the portion 4a comprises an upwardly oriented hook". This is in contradiction of what the Examiner says elsewhere in the Office Action. At page 4, lines 10 to 11 of the Office Action the Examiner states: "Buttgereit shows the claimed step with the exception of the upwardly oriented hook". It is Applicant's view that this latter statement is the correct one.

The Examiner's contention that a hook can be construed to include the enlarged end 4a in Buttgereit is contrary to any known or usual definition of the word. The definition in Webster's Revised Unabridged Dictionary, 1998, is typical - "a piece of metal, or other hard material, formed or bent into a curve or at an angle, for catching, holding, or sustaining anything; as, a hook for catching fish; a hook for fastening a gate; a boat hook, etc."

The attachment portion of the joint in Buttgereit operates by having a head portion larger than the slot. Should the Examiner contend that a portion of the enlarged head can constitute a hook it is notable that the claim now requires the hook to extend out and then up. The portion of the enlarged head that extends up in Buttgereit plays no role in Buttgereit, hence the alternative downward hook in Figure 10.

The Examiner goes on to say "the member 2 can be used as a step". The scaffolding of Buttgereit could be used as a step, although not for a utility pole. But that does not make it a step, in the same way that the top of a car, a desk or a bucket are not a step. In any case what the claim requires is that the main member has a "step member". It is unreasonable for the Examiner to construe step member so as to include anything that might possibly be used as a step. That would imply covering any solid object, making the claim term entirely meaningless. It is quite clear from the patent application that that is not what is intended by the term "step member". To clarify this the additional requirements that the step member has a free end, and an upwardly facing support surface between the free end and the proximal end has been added. However the term "step member" implies these in any case.

In reply to the prior argument, the Examiner goes on to state "With respect to Kemper, the bolt member is capable of being stepped [sic] on, element 30 as a flange, and element 14 comprises an upwardly orientated portion which hooks to the inner portion of the wall". The extended portion of the bolt 10 is capable of being stepped on. However as with Buttgereit it is not a step in the same way that not every other solid object is a step. In any case the claim requires a "step member", whereas the notched portion of the bolt has a free end 24 extending from the face of the secured plates 20 and 22.

In the context of a telephone pole it is quite obvious that the bolt and wedge assembly of Kemper would be entirely ineffective. The Examiner says element 14 comprises an upwardly oriented portion which hooks to the inner portion of the wall. Element 14 is in fact a "head 14". Figure 1 is a side view of the bolt. Figure 3 is a cross-sectional view taken online III-III in Figure 1. From these views it is clear that the head 14 extends as a flange all around the shank of the bolt. As with the enlarged end 4a in Buttgereit, the head 14 does not fit with any known or usual definition of the word hook. It extends all around and it makes the bolt and wedge assembly of Kemper impossible to use as a step member for a thin walled utility pole as it requires access to both sides of the wall portion through which it is to be secured. The bolt and wedge assembly of Kemper is intended for use to secure metal plates where access can be had to both sides, and where an aperture is closely fitted to the diameter of the shank of the bolt, which does not allow the head of the bolt to pass through.

Referring back then to the specific rejections made by the Examiner in the second Office Action, the Examiner rejects claim 13 as being anticipated by Buttgereit, and claims 9, 13 and 25 as being anticipated by Kemper. The response to these rejections is adequately discussed above. The enlarged end 4a in Figure 1 of Buttgereit does not constitute a hook under any normal definition of the word. Furthermore the scaffolding member of

Buttgereit does not constitute a step, let alone a step member. The downwardly extending portion 8b in Figure 10 of Buttgereit is not upwardly oriented. The head 14 of the bolt 10 in Kemper is not a hook according to any normal definition of the word. The bolt 10 in Kemper is not a step. The bolt and wedge assembly in Kemper or the scaffolding assembly of Buttgereit are not suitable or useable as a step for hollow section utility poles. Accordingly neither Buttgereit nor Kemper anticipate the claims of the present application.

The Examiner has rejected claim 16 as unpatentable over Buttgereit in view of Eich. The Examiner says Buttgereit shows the claimed wedge with the exception of the substantially same shape cross-section of the inner and outer faces along the length thereof. Eich shows a wedge, but the wedge is for splitting timber. It is a great leap that is not supported by the documents for the Examiner to say that Eich would teach anything to the person of ordinary skill in the art with the knowledge of Buttgereit. In Eich "the ribs of flanges 9 serve to guide and retain the wedge within the curve for split in the timber". How could this suggest any modification of Buttgereit to the one of ordinary skill in the art? One of ordinary skill in the art, seeing Eich, might conclude that it would be useful to adopt such a profile in respect of a wedge for use in Buttgereit, but in doing so the profile of the wedge from Eich would be for an entirely

different purpose than if used in Eich, and accordingly that recognition by one of ordinary skill in the art would constitute an invention. Inventions are not formed in a vacuum and it will often be the case that the root of an invention solving problem in one art is observing a device that solves an entirely different problem in a different art. That is the case here.

The Examiner presents an alternative rejection of claim 16 as being unpatentable over Eich in view of Buttgereit. This presents the same flaw as the aforementioned rejection as unpatentable over Buttgereit in view of Eich. The Examiner assumes that the one of ordinary skill in the art would, without apparent reason, decide to use the wedge of Eich for an entirely different purpose than it was intended. We submit that taking the wedge of Eich entirely out of its context where its form has the purpose that is recited from lines 52 to 74, into an entirely different use, where its form has an entirely new purpose and advantages, would quite clearly constitute an invention. Using the Examiner's wording it may "have been obvious to one of ordinary skill in the art at the time the invention was made to modify the wedge member of Eich to comprise an enclosed slot to enable its use as a wedging connector having a fastener extending therethrough", but only if the person of ordinary skill in the art had first decided to use Eich as such a wedging connector having a fastener extending

therethrough. That decision to use the wedge of Eich constitutes an invention.

The Examiner has rejected claim 13 and 25 as being unpatentable over Wood in view of Mey and German patent '295 to Von Kreisler. In particular the Examiner says "it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Wood to comprise an integral attachment portion, in lieu of his clamping hook portion, to enable a wedged attachment of his step, and a wedge capable of being used with his step for wedged attachment of his step." The Examiner says "applicant has not positively claimed any link between the wedge and step". Without including the utility pole in the claim it is hard to see how one could more positively claim the combination of the step and wedge member than it is claimed in claim 13.

The step of Wood does not include a wedge member. In manufacturing an argument under Section 103(a) for the combination of Wood, Mey and Von Kreisler, the Examiner says it would be obvious to make various modifications to Wood "to enable a wedged attachment of his step". But why? What is the motivation to make a wedged attachment of his step. In the case of Von Kreisler, the step is attached through a solid pole in a manner illustrated in Figure 1 and Figure 5. The step includes several shanks 13 extending through apertures 14 in the pole. The shanks extend

clear through to the other side of the pole. Wedges 18 are used to lock the shanks 13 in position. So compared with the present invention, the step 40 includes two attachment portions for each step, and these must pass clear through the pole and be secured on the far side. To the nominal person this is an inferior construction already disclosed to that in Wood which uses a single attachment through a single hole and can be secured in place from the same side that the step is inserted. Accordingly, Von Kreisler does not provide any motivation to one of ordinary skill "to enable a wedged attachment of his step".

Similarly, Mey discloses beams 4 cantilevered from a supporting column. As far as can be determined each of the beams includes a pair of hook portions 5 extending from the plate 7. The hook portions 5 pass through slots 3 and are secured on the reverse face of the wall 2, and each is secured by a locking plate 20. Mey does not disclose securing by a wedge member, but by a flat locking plate. The locking plate 20 of Mey requires access to the reverse face of the wall 2. Mey requires slots rather than a circular hole to be formed in the wall section. All of these are substantial disadvantages as compared to Wood, which allows a step to be secured through a round hole in a pole, with the securing being effected from the same side that the step is inserted. Like Von Kreisler, Mey provides no motivation for one of ordinary skill

in the art to "enable a wedged attachment of his step" which is the starting point or motivation for the Examiner's cited combination.

The Examiner further rejects claim 13 as unpatentable over Buttgereit in view of Mey or Wood. In this passage the Examiner admits that Buttgereit does not show the claimed upwardly oriented hook. As was already discussed Buttgereit furthermore does not show a step, but scaffolding. While the scaffolding could be used as a step it is no more a step than is any solid object and is clearly useless as a "step for attachment to a utility pole having a thin wall section". Therefore to modify the attachment portion of Buttgereit in any way would, in any case, not lead to the claimed invention.

Nonetheless it would also not be obvious to modify Buttgereit in view of Mey or Wood. Buttgereit is a scaffolding system. The lateral poles of the scaffolding system extend between an upright at either end. The poles lock into the scaffolding uprights at either end through one side wall of the end poles.

The arrangement of Mey requires a locking plate between the hook 5 and the wall 2 on the far side of the wall. Clearly access to the inside of the upright pole of Buttgereit is impossible. Accordingly an arrangement similar to Mey could only be achieved if the slotted holes of Buttgereit extended completely through the scaffolding pole so the hook could extend completely through to be secured on the far side by plate 20. The person of

ordinary skill in the art would not adopt a more complex construction requiring additional holes through the upright member, and precise alignment of the scaffolding cross members with the upright member to pass through holes on each side when there is no discernable benefit to adopting this connection over the connection system already present in Buttgereit.

On the other hand Wood discloses a connection system including an upward hook that can pass through from one side and then be drawn into place by tightening a nut on a threaded shank. While this is advantageous in the context of the pole step disclosed in Wood it is ineffectual or impossible to adopt in Buttgereit. A horizontal member of Buttgereit terminated at both ends with an upward hook (instead of a downward hook or outwardly deformed end portion) is not capable of being inserted into the holes of both upright members to which it is to connect unless those holes are slotted to an extent to accommodate the vertical dimension of the hook (just as they are slotted to such an extent to accommodate the vertical extent of the downward hook of Figure 8 of Buttgereit).

To insert the hook through a smaller hole requires the ability to tilt the member through a substantial angle relative to the pole. While this might be achieved for one end it can clearly not be subsequently achieved for the other end. Once the horizontal member is in place the upward hooks would have no

securing effect in the upward orientation as they could withdraw freely through the slotted holes. Accordingly the only orientation that makes sense in Buttgereit, if a hook is adopted, is that which is already disclosed in Buttgereit (Figure 10), in which the hook is oriented downward. In that configuration, once the hooks are passed through the holes, the entire pole and hooks move downward so that the thin wall of the upright, at the lower edge of the hole, is between the end of the scaffolding member and the hook. Accordingly, there is motivation for adopting an upwardly oriented hook in Buttgereit for the reason that it would not work and does not provide any working embodiment even comparably effective with the embodiment in Buttgereit let alone having any advantage.

The Examiner has gone on to reject claims 24 and 25 as unpatentable over Buttgereit and either Mey or Wood as applied, and further in view of Eich as applied. The comments above apply to this further combination.

In summary, contrary to the Examiner's view, the prior art cited effectively demonstrates the patentability of the invention present claimed. The prior art steps for thin walled utility poles - Davidson and Wood are adapted to be secured through a simple round hole in the wall of the pole but require a threaded fastener engagement. Wedge secured devices have either required the securing wedge or plate to be applied at the far side of the wall section - Kemper, Mey, Von Kreisler - or have been for less

demanding applications - Buttgereit, which also requires a slotted hole. The prior art has no incentive for the person of ordinary skill in the art to modify the existing pole steps for thin wall utility poles when in each case the wedge arrangement indicated would make the step ineffective, inconvenient or insecure.

While the present invention includes elements that are present across a variety of prior art documents it brings those elements together in a novel arrangement that is effective, convenient and secure. It is only with hindsight knowledge of the present invention and the advantages that it provides that the Examiner argues that the person of ordinary skill would bring these elements together.

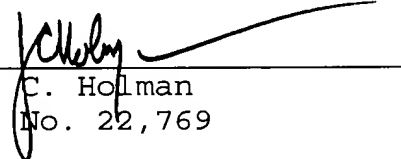
Based on the foregoing amendments and remarks, it is respectfully submitted that the claims in the present application, as they now stand, patentably distinguish over the references cited and applied by the Examiner and are, therefore, in condition for allowance. A Notice of Allowance is in order, and such favorable action and reconsideration are respectfully requested.

However, if after reviewing the above amendments and remarks, the Examiner has any questions or comments, he is cordially invited to contact the undersigned attorneys.

Respectfully submitted,

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